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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,375	10/20/2003	David W. Baarman	18716.84220-001	3356

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EXAMINER

DESCHERE, ANDREW M

ART UNIT	PAPER NUMBER
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2836

MAIL DATE	DELIVERY MODE
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08/23/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/689,375	Applicant(s) BAARMAN, DAVID W.	
	Examiner Andrew M. Deschere	Art Unit 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 15 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-8,12,13,23,24 and 47-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-8,12,13,23,24 and 47-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The Request for Continued Examination filed 15 June 2007 has amended claims 1, 3, 5-8, 12, 13, 23, and 24; claims 47-51 have been added; and claims 2, 4, 9-11, 14-22, and 25-46 have been cancelled. The submitted amendments to the Specification are acceptable.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12, 24, 50, and 51 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The preamble of currently amended claim 12 recites "The system of claim 11". However, claim 11 has been cancelled by the current amendment. For purposes of examination, the Examiner assumes claim 12 depends from claim 1, allowing for the broadest reasonable interpretation.

The preamble of new claim 50 recites "The system of claim 23". However, claim 23 is a method claim. Further, the preamble of currently amended claim 24 recites "The method of claim 50". In view of these discrepancies, the Examiner is unable to determine the intended parent claim from which claims 50 and 24 depend.

Currently amended claim 51 recites "The method of claim 13 wherein each of the first and second creating steps includes using two transceivers." However, claim 13 is drawn to a

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system, not a method. For purposes of examination, the Examiner assumes claim 51 was intended to depend upon claim 23, which provides steps for creating. The Examiner further assumes that the "first and second creating steps" of claim 51 refer to "creating a first communication link" and "creating a second communication link" in claim 23.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 12, 13, 23, 47-49, and 51 rejected under 35 U.S.C. 103(a) as being unpatentable over Parks (US 5,455,466) and Ichihara (US 6,424,124).

Parks discloses a system for inductively (contactlessly) transferring power and data to a portable electronic device (Figures 1 and 2). The portable electronic device 12 contains a secondary winding 200b, a rechargeable battery power source 225, a transceiver (modem 220), and rectifier 222 and charging circuit 224 for regulating power to the battery (column 3, lines 26-67). The modem performs both modulation and demodulation, allowing two-way communication with a support unit 14 (column 4, lines 27-56). The support unit inductively supplies power to the portable electronic device, and includes a transceiver (formed by a demodulator 204 and a modulator 206), as well as a primary winding 200a. The portable electronic device 12 may be a personal digital assistant or portable personal computer (column 1, lines 14-23).

Parks discloses the inductive power transfer system as above, but does not teach a further remote device connected to the portable electronic device (adapter). Ichihara discloses

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a system for supplying power to portable devices (Figures 1 and 3). A mobile phone 1 (a remote device) includes a rechargeable battery 308 as its power supply and a CPU 301 as its controller (column 5, lines 16-53). A computer 2 charges the mobile phone via a coupling cable 5, the coupling cable also allowing two-way communication between the CPUs of the mobile phone and the computer (column 5, line 64 to column 6, line 13). Computer 2 may be a portable personal computer (column 4, lines 8-13).

A combination of Parks and Ichihara would provide an adapter (portable personal computer) that receives power from and communicates with a contactless power supply (support unit), and supplies power to and communicates with a remote device (mobile phone). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Parks and Ichihara to reduce inconvenient cabling (Parks, column 1, lines 43-55) and enhance charging ability (Ichihara, column 1, lines 31-63) for portable, rechargeable electronic devices.

With regard to claim 3, Parks does not disclose the details of charging circuit 224, only suggesting that it comprises conventional circuitry and components (Parks, column 3, lines 65-67). A controller for such circuitry and components is well known in the art, such as the battery control circuit 317 of Ichihara, which acts based upon commands received from the CPU 311 (Ichihara, column 4, lines 25-31). It would have been obvious to one of ordinary skill in the art at the time of the invention to control the battery of Parks by a CPU as taught by Ichihara to combine component functionality to limit complexity in construction.

With regard to claim 12, the computer of Ichihara receives a charging request from the mobile phone (column 4, line 61 to column 5, line 5).

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With regard to claims 47-48, Parks discloses a computer 16 in two-way communication with the support unit via a data transmission line 210 (column 3, lines 50-60; column 4, lines 36-50).

With regard to claim 23, the above combination of Parks and Ichihara provides a first communication link (between a mobile phone and a portable personal computer), a second communication link (between a personal portable computer and a support unit), and a third communication link (between a support unit and a computer). While a fourth communication link is not expressly taught, it is well known to one of ordinary skill in the art to connect a computer to a network via a communication link. It would have been obvious to one of ordinary skill in the art at the time of the invention to connect the computer to a network to transmit and receive data from other computers and network-enabled devices.

Claims 5-8 rejected under 35 U.S.C. 103(a) as being unpatentable over Parks and Ichihara as applied to claim 4, and in further view of Zimmer (US 6,703,920).

Parks discloses an inductive charging system as above, but does not teach that the contactless interface may include a variable impedance element. Zimmer teaches a method of contactless transmission of power or data, having a resonant circuit. The impedance of the resonant circuit is varied by switching an impedance element in either series or parallel configuration, as set by controller 2 (Zimmer, Figure 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to include such variable impedance in the combination of Parks and Ichihara in order to provide optimal transmission of data and power over the contactless power interface (Zimmer, column 4 lines 6-15). Furthermore, inductive elements may be switched as taught by Zimmer (column 4, lines 30-37).

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Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Stephens (US 5,734,254) discloses inductive charging of a battery pack and portable electronic device. Sakakibara (US 2003/0090239) discloses contactless charging of a battery pack using an adapter (Figure 22).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew M. Deschere whose telephone number is (571) 272-8391. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (571) 272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AMD


MICHAEL SHERRY
SUPERVISORY PATENT EXAMINER

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DO NOT SEND OUT, NOTES

With regard to the Applicant's claim language, the portable electronic device of Parks encompasses the "adapter" in the claims, and the support unit of Parks encompasses the "contactless power supply" in the claims.